



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

OCT 3 2001

DOT-E 11770
(SECOND REVISION)

EXPIRATION DATE: August 31, 2003

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Gas Cylinder Technologies Inc.
Ontario, Canada
(U.S. Agent: John Simes, Heathrow, FL)
2. PURPOSE AND LIMITATIONS:
 - a. This exemption authorizes the manufacture, mark, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT Specification 3E cylinder, except as specified herein, for the transportation in commerce of those materials authorized in DOT Specification 3E cylinders. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.302 and 173.304 in that non-specification cylinders are not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of Gas Cylinder Technologies dated September 5, 2001, submitted in accordance with § 107.109.

OCT 3 2001

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identi- fication Number	Packing Group
All liquefied and non-liquefied gases authorized for 3E cylinders	2.1, 2.2 & 2.3	Various	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed are non-DOT specification cylinders manufactured in accordance with the DOT 3E specification in §178.42 except as follows:

§ 178.42(a) *Type, size, and service pressure.*

The nominal outside diameter may not be greater than 63.5 mm (2.5 inches) and the length may not be greater than 30.5 mm (12 inches).

§ 178.42(b) *Steel.*

The steel analysis must be in conformance with the following:

Chemical Composition in Weight Percent

<u>Element</u>	<u>Ladle analyses</u>	<u>Check analyses</u>	<u>Tolerance</u>	
			<u>Under</u>	<u>Over</u>
Carbon	.25/.35		0.01	0.02
Manganese	.40/.90	0.03	0.03	
Phosphorus	.04 Max.	-		0.01
Sulfur	.05 Max.	-		.001
Silicon	.15/.35		0.02	0.03
Chromium	.80/1.10	0.03	0.03	
Molybdenum	.15/.25		0.01	0.01

§ 178.42(f) *Hydrostatic test.*

* * *

(1) * * *

(2) One cylinder out of each lot of 500 or less must be subject to flattening test without cracking to six times wall thickness between knife edges, wedge shaped 60 degree angle, rounded to a 1½ inch radius.

§ 178.42(i) *Marking.*

Each cylinder must be marked as required by § 178.35 except, "DOT-E 11770" in lieu of "DOT 3E" followed by the service pressure.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.

c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this exemption must be marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and rail freight.

10. MODAL REQUIREMENTS: No additional requirements other than those required in the HMR.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

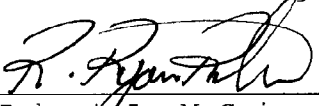
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued in Washington, D.C.


for Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

OCT 3 2001

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S.
Department of Transportation, 400 7th Street, S.W., Washington,
DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: KFW/AM